

### ABSTRACT OF THE DISCLOSURE

Novel iron sulfides having excellent durability and excellent treating properties of heavy metals, processes for producing the iron sulfides, iron sulfide mixture, a heavy metal treating agent containing either of these novel iron sulfides as an effective component, and a method by which wastes containing various heavy metals are treated with the heavy metal treating agent are disclosed. The iron sulfide having a mackinawite structure which contains  $\text{FeM}_x\text{N}_y\text{S}_z$  wherein M represents an alkaline earth metal, N represents an alkali metal, and x, y and z, indicating the molar proportions of the respective elements, represent numbers satisfying  $0.01 < x \leq 0.5$ ,  $y \leq 0.2$  and  $0.7 \leq z \leq 1.4$ , as an essential component.